

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant:

Chi, et al.

Docket No.:

TSM03-0422

Serial No.:

10/718,920

Art Unit:

TBD

Filed:

November 21, 2003

Examiner:

TBD

For:

Modification of Carrier Mobility in a Semiconductor Device

Certificate of Mailing via First Class Mail (37 C.F.R. § 1.8(a))

Date of Deposit:

March 11, 2004

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Certificate of Mailing via First Class Mail (1 page)
Information Disclosure Statement (1 page)
IDS Form PTO/SB/08a and 08b (2 pages) citing (10) references
Copies of (9) cited references
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Respectfully submitted,

Natalie Swider Legal Assistant

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Tel: 972-732-1001 Fax: 972-732-9218

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Commissioner for Patents P. O. Box 1450 Alexandria, VA 22313-1450

INFORMATION DISCLOSURE STATEMENT

Dear Sir:

Applicants wish to bring to the attention of the Patent and Trademark Office the information noted on the enclosed form PTO/SB/08a & 08b that may be considered material to the examination of the above-identified application.

No fee is due at this time, as this Information Disclosure Statement is being filed pursuant to 37 C.F.R. § 1.97(b)(3), before the mailing of a first Office action on the merits.

Respectfully submitted,

March 11, 2004

Date

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PTO/SB/08a (08-03)

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EM	Substitute for form 1449A/PT0	`		Cor	nnlete if Known
	Substitute for form 1449AVP TC	,		Application Number	10/718,920
	INFORMATION	I DISCLO	SURE	Filing Date	11/21/2003
	STATEMENT E	SY APPLI	CANT	First Named Inventor	Chi, et al.
				Art Unit	TBD
	(Use as many she	eets as necessar	y) 	Examiner Name	TBD
Shee	t 1	of	2	Attorney Docket Number	TSM03-0422

	U.S. PATENT DOCUMENTS						
Examiner Initials*	Cite No.1	Document Number Number - Kind Code ^{2 (if known)}	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear		
	1	US-2003/0162348 A1	08-28-2003	Yeo, et al.			
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	FOREIGN PATENT DOCUMENTS								
Examiner	Cite No.1	Foreign Patent Document	Publication Date	Name of Patentee or	Pages, Columns, Lines,				
Initials*		Country Code ³ - Number ⁴ - Kind Code ⁵ (<i>if known</i>)	MM-DD-YYYY	Applicant of Cited Document	Where Relevant Passages or Relevant Figures Appear				
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| Consider considered. Include copy of this form with next communication to applicant. 'Applicant's unique citation designation number (optional). 'See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. 'Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). 'For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. 'Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. 'Applicant is to place a check mark here if English language

Translation is attached.

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PTO/SB/08b (08-03)

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Substitute for form 1449B/PTO				Complete if Known		
				Application Number	10/718,920	
INF	ORMATION DISC	a osi	IRF	Filing Date	11/21/2003	
STATEMENT BY APPLICANT				First Named Inventor	Chi, et al.	
317	STATEMENT BY APPLICANT			Art Unit	TBD	
	(Use as many sheets as ned	cessary)		Examiner Name	TBD	
Sheet	2	of	2	Attomey Docket Number	TSM03-0422	

		NON PATENT LITERATURE DOCUMENTS	
Examiner Initials*	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
	2	Rim, K., et al., "Fabrication and Analysis of Deep Submicron Strained-Si N-MOSFET's," IEEE Transactions on Electron Devices, vol. 47, no. 7, pp. 1406-1415, July 2000.	
	3	Rim, K., "Strained Si Surface Channel MOSFETS for High-Performance CMOS Technology," IEEE International Solid-State Circuits Conference, paper #7.3, pp. 116-117, 2001.	
***************************************	4	Yeo, Y.C., et al., "Enhanced performance in Sub-100 nm CMOSFETs using Strained Epitaxial Silicon-Germanium," International Electron Device Meetings, pp. 753-756, 2000.	
	5	Ootsuka, F., et al., "A Highly Dense, High-Performance 130nm Node CMOS Technology for Large Scale System-on-a-Chip Applications," International Electron Device Meetings, pp. 575-578, 2000.	
	6	Ito, S., et al., "Mechanical Stress Effect of Etch-Stop Nitride and Its Impact on Deep Submicron Transistor Design," International Electron Device Meetings, pp. 247-250, 2000.	
	7	Shimizu, A., et al., "Local Mechanical-Stress Control (LMC): A New Technique for CMOS-Performance Enhancement," International Electron Device Meetings, pp. 433-436, 2001.	
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	9	Scott, G., et al., "NMOS Drive Current Reduction Caused by Transistor Layout and Trench Isolation Induced Stress," International Electron Device Meetings, pp. 827-830, 1999.	
	10	Bianchi, R.A., et al., "Accurate Modeling of Trench Isolation Induced Mechanical Stress Effects on MOSFET Electrical Performance," International Electron Device Meetings, pp. 117-120, 2002.	

Examiner	Date
Signature	Considered

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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